

2. (ONCE AMENDED) A path setting device to secure bandwidth for multiple paths to provide a service from a service provider to a subscriber, comprising:

means for determining whether a received message is a request message for a first path, the request message including bandwidth information for a plurality of paths set for the service required by the subscriber;

means for securing a bandwidth based on the bandwidth information set in the request message for the first path between the service provider and the subscriber in response to receiving the request message for the first path;

means for calculating a bandwidth required for all paths set to provide the service for a subscriber based on the requested bandwidth information set in the request message for the first path from the subscriber;

means for comparing the calculated bandwidth to an available bandwidth between the service provider and the subscriber;

means for securing the calculated bandwidth if the calculated bandwidth is less than or equal to the available bandwidth;

means for setting the first path between the service provider and the subscriber in response to the request message for the first path; and

means for notifying that it is impossible to set a path to the subscriber if the calculated bandwidth is larger than the available bandwidth.

3. (ONCE AMENDED) A path setting device to secure bandwidth for multiple paths to provide a service from a service provider to a subscriber, comprising:

means for determining whether a received message is a request message for a first path, the request message including bandwidth information for a plurality of paths set for the service required by the subscriber;

means for securing a bandwidth based on the bandwidth information set in the request message for the first path between the service provider and the subscriber in response to receiving the request message for the first path;

means for determining whether the received message is a following request message for a remaining path in which information identifying the request message for the first path is set; and

means for setting the remaining path between the service provider and the subscriber in

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response to the following request message for the remaining path.

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5. (ONCE AMENDED) A path setting device as recited in claim 2, further comprising means for determining whether the received message is a following request message for a remaining path in which information identifying the request message for the first path is set; and

means for setting the remaining path between the service provider and the subscriber in response to the following request message for the remaining path.

7. (ONCE AMENDED) A path setting control method of securing bandwidth for multiple paths to provide a service from a service provider to a subscriber via a switching system, comprising:

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sending a request message for a first path from the subscriber to the switching system, the request message including bandwidth information for the multiple paths to provide the service for a subscriber; and

securing a bandwidth based on the bandwidth information in the request message for the first path between the service provider and the subscriber when the request message for the first path is received at the switching system.

8. (ONCE AMENDED) A path setting control method of securing bandwidth for multiple paths to provide a service from a service provider to a subscriber via a switching system, comprising:

sending a request message for a first path from the subscriber to the switching system, the request message including bandwidth information for the multiple paths to provide the service for a subscriber;

securing a bandwidth based on the bandwidth information in the request message for the first path between the service provider and the subscriber when the request message for the first path is received at the switching system

setting the first path in response to the request message for the first path between the service provider and the subscriber; and

setting a remaining path in response to the following request message for the remaining path between the service provider and the subscriber.

9. (ONCE AMENDED) A switching system for setting multiple paths for a service provided from a service provider to a subscriber, comprising:

an extraction device to extract messages from a subscriber;

a message determination device to determine whether the message extracted by the message extraction device is a request message for a first path between the service provider and the subscriber, the request message including bandwidth information for a plurality of paths for the service; and

a bandwidth securing and processing device to secure a bandwidth based on requested bandwidth information set in the request message in response to receiving the request message for the first path.

Q³ 10. (ONCE NAMENDED) A switching system for setting multiple paths for a service provided from a service provider to a subscriber, comprising:

an extraction device to extract messages from a subscriber;

a message determination device to determine whether the message extracted by the message extraction device is a request message for a first path between the service provider and the subscriber;

a bandwidth securing and processing device to secure a bandwidth based on requested bandwidth information set in the request message in response to receiving the request message for the first path; and

a presumed bandwidth calculating device to calculate a presumed bandwidth for each respective path based on the requested bandwidth information set in the request message, and to calculate a total presumed bandwidth based on the presumed bandwidths.

11. (ONCE AMENDED) A switching system for setting multiple paths for a service provided from a service provider to a subscriber, comprising:

an extraction device to extract messages from a subscriber;

a message determination device to determine whether the message extracted by the message extraction device is a request message for a first path between the service provider and the subscriber; and

a bandwidth securing and processing device to secure a bandwidth based on requested

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bandwidth information set in the request message in response to receiving the request message for the first path, wherein said bandwidth securing and processing device compares the bandwidth to the available bandwidth, and secures the bandwidth when the bandwidth is less than or equal to the available bandwidth.

13. (ONCE AMENDED) A path setting device to secure bandwidth for multiple paths to provide a service from a service provider to a subscriber, comprising:

means for determining whether a received message is a request message;

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means for determining whether a number of request messages received from the same subscriber reaches a number of paths set in the request message for the first path;

means for securing a bandwidth required for all paths set to provide the service for the subscriber between the service provider and the subscriber when the number of request messages received from the same subscriber reaches the number of paths set in the request message for the first path.

16. (ONCE AMENDED) A path setting control method of setting multiple paths for a service provided from service provider to a subscriber via a switching system, comprising:

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sending a request message from the subscriber to the switching system to set, in order of large bandwidth to small bandwidth, the various bandwidth which correspond to multiple paths required to provide the service; and

securing the bandwidth required between the service provider and the subscriber in order of large bandwidth to small bandwidth in response to the request message.
